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CORRESPONDENCE

Continuation of dual anti-platelet therapy after drug-eluting stents in primary angioplasty beyond 12 months [v1; ref status:

indexed, http://f1000r.es/TbAhzm]

Iman Mohasseb¹, Christian A Gericke^{2,3}

V1

First Published: 21 Nov 2012, 1:53 (doi: 10.12688/f1000research.1-53.v1)

Latest Published: 21 Nov 2012, 1:53 (doi: 10.12688/f1000research.1-53.v1)

Abstract

In this correspondence we discuss the results of the meta-analysis by De Luca *et al.* (2012) in the Archives of Internal Medicine which found that late myocardial reinfarction and stent thrombosis is more common in drug-eluting stents than in bare-metal stents. We discuss the clinical implications of this paper for dual anti-platelet therapy which did not receive sufficient attention in the original publication and the accompanying editorial.

Article Status Summary Referee Responses			
Referees	1	2	
v1 published 21 Nov 2012	⊻	✓	
Sripal Bangalore, New York University School of Medicine USA			
2 Bruce Biccard, Nelson R Mandela School of Medicine University of Kwazulu-Natal South Africa			
Latest Comments			
No Comments Yet			

Corresponding author: Christian A Gericke (christian.gericke@pcmd.ac.uk)

How to cite this article: Mohasseb I, Gericke CA (2012) Continuation of dual anti-platelet therapy after drug-eluting stents in primary angioplasty beyond 12 months [v1; ref status: indexed, http://f1000r.es/TbAhzm] F1000Research 2012, 1:53 (doi: 10.12688/f1000research.1-53.v1)

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Grant information: We acknowledge funding from the National Institute for Health Research (NIHR) for CAG's contribution to this article. The views and opinions expressed in this paper are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health in England

The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Competing Interests:

CAG is a member of the Asia-Pacific Advisory Board for Bayer Pharmaceuticals.

First Published: 21 Nov 2012, 1:53 (doi: 10.12688/f1000research.1-53.v1)
First Indexed: 05 Dec 2012, 1:53 (doi: 10.12688/f1000research.1-53.v1)

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The meta-analysis by De Luca *et al.*¹ showed that the incidence of late (> 2 years) myocardial reinfarction and stent thrombosis is significantly higher in drug-eluting stents (DES) compared to bare-metal stents (BMS) in primary angioplasty despite the significant reduction in long-term target vessel revascularization associated with DES.

While the Comment section of the paper briefly mentions the role of more potent and prolonged dual anti-platelet therapy in countering these worrisome findings, the related Commentary² does not. However, in our view the current practice of discontinuing dual anti-platelet therapy after 12 months in DES in most patients is the most likely explanation for the observed increase in late stent thrombosis and reinfarction incidence, in concordance with pathological evidence that even beyond 40 months, DES do not fully epithelialize³. In the De Luca *et al.*¹ meta-analysis, the DES survival curves for both reinfarction and stent thrombosis start diverging from the BMS curves one year after stent implantation until year 6.

This also raises the most relevant question for practitioners: should we prolong dual anti-platelet therapy beyond 12 months after DES implantation? The Dual Antiplatelet Therapy Study (DAPT) is expected to give us a definitive answer to this question in 2014⁴.

For the time being, it seems that the argument to continue dual anti-platelet therapy beyond 12 months, which is fully in line with the current ACCF/AHA/SCAI recommendation⁵ to continue dual anti-platelet therapy *for at least* 12 months after DES implantation, has gained in strength.

Author contributions

IM drafted the first version of this correspondence article and IM and CAG have substantially revised it after discussion.

Competing interests

CAG is a member of the Asia-Pacific Advisory Board for Bayer Pharmaceuticals.

Grant information

We acknowledge funding from the National Institute for Health Research (NIHR) for CAG's contribution to this article. The views and opinions expressed in this paper are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health in England.

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Current Referee Status:





Referee Responses for Version 1



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Approved: 05 December 2012

Referee Report: 05 December 2012

I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Competing Interests: No competing interests were disclosed.



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Approved: 29 November 2012

Referee Report: 29 November 2012

I have read this submission. I believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Competing Interests: No competing interests were disclosed.

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